



US 20150131511A1

(19) **United States**(12) **Patent Application Publication**
Ghosh et al.(10) **Pub. No.: US 2015/0131511 A1**(43) **Pub. Date: May 14, 2015**(54) **ENABLING COEXISTENCE BETWEEN
WIRELESS NETWORKS AND RADAR
SYSTEMS**(52) **U.S. Cl.**CPC *H04L 5/0062* (2013.01); *H04W 72/005*
(2013.01)(71) Applicant: **Nokia Corporation**, Espoo (FI)(72) Inventors: **Chittabrata Ghosh**, Fremont, CA (US);
Klaus F. Doppler, Albany, CA (US)(73) Assignee: **Nokia Corporation**, Espoo (FI)(21) Appl. No.: **14/080,008**(22) Filed: **Nov. 14, 2013****Publication Classification**(51) **Int. Cl.***H04L 5/00* (2006.01)*H04W 72/00* (2006.01)(57) **ABSTRACT**

A method includes determining information about a radiation pattern of a radar beam that uses a bandwidth. Based on the information, a determination is made whether a channel using at least a portion of the bandwidth is or is not available for access by mobile devices. A transmission is performed to the mobile devices of one or more specific broadcast frames configured to advertise whether the channel is or is not available for access by the mobile devices. Another method includes receiving one or more specific broadcast frames configured to advertise whether a channel is or is not available for access, wherein the channel uses at least a portion of bandwidth used by a radar beam. The channel is or is not accessed based on the one or more specific broadcast frames. The access can be contention-based or contention-free. Apparatus and program products are also disclosed.

